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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,135	10/09/2001	Thomas C. Fall	01-1002	4739
7590 09/29/2005				
Keith D. Nelson Lockheed Martin Corporation Building 220, Mail Stop A08 P. O. Box 49041 San Jose, CA 95161-9041			EXAMINER TRAN, PHUC H	
			ART UNIT 2666	PAPER NUMBER
DATE MAILED: 09/29/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/973,135

Applicant(s)

FALL, THOMAS C.

Examiner

PHUC H. TRAN

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 2-9, 11-13 and 16-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding to claims 2, and 16, the step of “notifying upstream node if resources at that node are committed to higher precedence streams; and notifying upstream nodes that an in-place stream may be interrupted by a new higher precedence stream” was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art at the time the application was filed.

Regarding to claims 11-13, these limitations “network resource allocation base upon priority position in a queue, in a central processing unit, memory capacity for processing” was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art at the time the application was filed.

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3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3-9, and 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding to claim 3, and 15, “the control signaling” is insufficient antecedent basis for this limitation in the claim.

Regarding to claims 4 and 16, “wherein uninterrupted transport” is not discloses in claims 2, & 14, which claims 4 & 16 depended on that the claim vague and indefinite because applicant never recited “uninterrupted transport” before.

Regarding to claims 7 and 19, “wherein control messages” is not discloses in claims 4 and 16, which claims 7 and 19 depended on that the claim vague and indefinite because applicant never recited, “control messages” before.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

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do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-3, 10, & 14-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Krishnamurthy et al. (U.S. Patent No. 6910024B2).

- With respect to claim 1, Krishnamurthy teaches a communication method for use in a dynamic network comprising the steps of:

- allocating network resources of a dynamic network to a data stream based upon precedence levels of other data streams desiring the same resources or already utilizing the same resources (col. 2, lines 23-28, lines 43-48).

- With respect to claim 2, Krishnamurthy further teaches finding routes from a source to a destination that can be supported at a given precedence level (col. 2, lines 15-55).

- With respect to claim 3, Krishnamurthy discloses wherein nodes track a control signaling in a routing database and use this retained information to either facilitate a route request or to ensure that low precedence control is not forwarded into portions of the network known to require higher precedence (col. 5, lines 13-29).

- With respect to claim 10, Krishnamurthy teaches wherein network resource allocation is based upon link bandwidth (col. 2, lines 26-28).

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-9, & 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnamurthy et al. (U.S. Patent No. 6910024B2) in view of Shabtay et al. (U.S. Patent No. 6895441 B1).

- With respect to claims 4, 6, 16, and 18, Krishnamurthy discloses all the aspect of the claimed invention as set forth and to teach the method comprising the steps of: establishing a primary route for data flow of a given precedence from a first node to a second node of the network using resources available at that precedence or lower (e.g. see abstract); but fails to teach establishing a secondary route for data flow from the first node to the second node using resources available at that precedence or lower; upon the occurrence of a failure of the primary route, switching the data flow from the primary route to the secondary route; establishing a new secondary route for data flow from the first node to the second node using signaling directed only to resources known to not be restricted to higher precedence levels; repeating the above steps again and again as intra-node links of the network are established and broken. Shabtay teaches upon the failure of the primary route, switch over the data flow to backup route and repeating the switching over to establish the failure (Fig. 8, col. 3, lines 53-64). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was

made to implement the step of establishing a backup link for the occurrence of a failure of primary route in communication system.

- With respect to claims 5, and 17-20, Krishnamurthy also fails to teach if a higher precedence flow is switched to a secondary route used by a lower precedence flow, the lower precedence flow is switched to its secondary rout. Shabtay teaches if a higher precedence flow is switched to a secondary route used by a lower precedence flow, the lower precedence flow is switched to its secondary rout (e.g. Fig. 8 teaches steps of find the secondary route). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement

- With respect to claim 7-9, Krishnamurthy explicitly teaches control messages are exchanged at a low rate between software agents at nodes of the network and are forwarded along active and secondary routes (col. 3, lines 59-67).

### ***Response to Amendment***

9. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Korpi et al. (U.S. Patent No. 6785223 B1) discloses system and method for restarting of signaling entities in H.323-based realtime communication networks.

Wang et al. (U.S. Patent No. 6901048 B1) discloses link-level protection of traffic in a packet-switched network.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuc Tran  
Assistant Examiner  
Art Unit 2664

P.t  
9/22/05



DANG TON  
PRIMARY EXAMINER